ELSEVIER

Bioenergetics
(including Reviews on Bioenergetics)
Vol. 1413, 1999

BIOCHIMICA ET BIOPHYSICA ACTA
BBA
www.elsevier.com/locate/bba

Cumulative Contents

Information for Contributors vii

Regular papers

The caa_3 terminal oxidase of the thermohalophilic bacterium *Rhodothermus marinus*: a HiPIP:oxygen oxidoreductase lacking the key glutamate of the D-channel
M.M. Pereira, M. Santana, C.M. Soares, J. Mendes, J.N. Carita, A.S. Fernandes, M. Saraste, M.A. Carrondo and M. Teixeira (Germany, Portugal) 1

Effect of adenine nucleotide pool size in mitochondria on intramitochondrial ATP levels
L. Schild, P.V. Blair, W.I. Davis and S. Baugh (Germany, USA) 14

Does photoinhibition and/or phosphorylation of photosystem II influence its in vivo oligomeric state?
A. Kitmitto, A.O. Mustafa, J.W. Ford, A. Holzenburg and R.C. Ford (UK) 21

Controlled distribution of electrons between acceptors in chloroplasts: a theoretical consideration
L.E. Fridlyand and R. Scheibe (Belarus, Germany) 31

Relative positions of electron transfer components in Photosystem II studied by '2+1' pulsed electron paramagnetic resonance: Y_D and Q_A
T. Yoshii, A. Kawamori, M. Tonaka and K. Akabori (Japan) 43

Short sequence-papers

Uncoupling protein 2 from carp and zebrafish, ectothermic vertebrates
J.A. Stuart, J.A. Harper, K.M. Brindle and M.D. Brand (UK) 50

Cloning and sequence analysis of the gene encoding *Methylophilus methylotrophus* cytochrome *c*″, a unique protein with a perpendicular orientation of the histidinyl ligands
N.J. Price, E. Vijgenboom, G. Ribeiro, J.V. Costa, G.W. Canters and H. Santos (Netherlands, Portugal) 55

Information for Contributors vii

Regular papers

Origin of selective inhibition of mitochondrial complex I by pyridinium-type inhibitor MP-24
J. Iwata, H. Miyoshi and H. Iwamura (Japan) 63

H_2O_2 detection from intact mitochondria as a measure for one-electron reduction of dioxygen requires a non-invasive assay system
K. Staniek and H. Nohl (Austria) 70

Evidence for the stabilization of NADPH relative to $NADP^+$ on the dIII components of proton-translocating transhydrogenases from *Homo sapiens* and from *Rhodospirillum rubrum* by measurement of tryptophan fluorescence
S.J. Peake, J.D. Venning, N.P.J. Cotton and J.B. Jackson (UK) 81

Extinction coefficients and midpoint potentials of cytochrome c_6 from the cyanobacteria *Arthrospira maxima*, *Microcystis aeruginosa*, and *Synechocystis* 6803
Y.S. Cho, Q.J. Wang, D. Krogmann and J. Whitmarsh (USA) 92

Information for Contributors vii

Regular papers

Iron-dependent changes in cellular energy metabolism: influence on citric acid cycle and oxidative phosphorylation
H. Oexle, E. Gnaiger and G. Weiss (Austria) 99

Exogenous quinones inhibit photosynthetic electron transfer in *Chloroflexus aurantiacus* by specific quenching of the excited bacteriochlorophyll *c* antenna
N.-U. Frigaard, S. Tokita and K. Matsuura (Japan) 108

State transitions, cyclic and linear electron transport and photophosphorylation in *Chlamydomonas reinhardtii*
G. Finazzi, A. Furia, R.P. Barbagallo and G. Forti (Italy) 117

Targeted disruption of the gene encoding the proteolipid subunit of mouse vacuolar H^+-ATPase leads to early embryonic lethality
H. Inoue, T. Noumi, M. Nagata, H. Murakami and H. Kanazawa (Japan) 130

Arylazido-β-alanine ADP-ribose, a novel irreversible competitive inhibitor of mitochondrial NADH-ubiquinone reductase
M.V. Frenkin and A.B. Kotlyar (Israel) 139

Turnover of the aggregates and cross-linked products of the D1 protein generated by acceptor-side photoinhibition of photosystem II
Y. Ishikawa, E. Nakatani, T. Henmi, A. Ferjani, Y. Harada, N. Tamura and Y. Yamamoto (Japan) 147

Effect of NBD chloride (4-chloro-7-nitrobenzo-2-oxa-1,3-diazole) on the pyridine nucleotide transhydrogenase of *Escherichia coli*
P.D. Bragg and C. Hou (Canada) 159

Association of bacteriochlorophyll *a* with the CsmA protein in chlorosomes of the photosynthetic green filamentous bacterium *Chloroflexus aurantiacus*
Y. Sakuragi, N.-U. Frigaard, K. Shimada and K. Matsuura (Japan) 172

Cumulative Contents, Vol. 1413 181

Author Index 183